AR 201-12549623

ROBUST SUMMARY
ALKYL SULFIDE CATETGORY
CAS # 68515-88-8
GENETIC TOXICITY ELEMENTS: GENETIC TOXICITY IN VITRO

Test Substance	
CAS #	CAS# 68515-88-8
Chemical Name	Pentene, 2,4,4-trimethyl-, sulfurized
Remarks	97% purity This chemical is also referred to as trimethyl pentene derivative in the HERTG's Test Plan for Alkyl Sulfide Category. For more information on the chemical, see Section 2.0 "Chemical Description of Alkyl Sulfide Category" in HERTG's Test Plan for Alkyl Sulfide Category.
Method	
Method/Guideline followed	Consistent with guidelines outlined in OECD 471
Test Type	Reverse mutation assay
System of testing	Bacterial
GLP (Y/N)	Y
Year (Study Performed)	1982
Species/Strain	Salmonella typhimurium TA98, TA100, TA1535, TA1537, TA1538
Metabolic activation	With and without
Concentrations	0 , 0.01, 0.03, 0.1, 0.3, and 1 microliter/plate (DMSO vehicle)
Statistical methods	The mean number of his$^-$ revertants/plate for three replicate assay plates was calculated for each concentration and strain.
Remarks field for test conditions	No significant deviations from guideline protocols
Results	
Remarks	The test material was tested without metabolic activation at 1, 0.3, 0.1, 0.03, and 0.01 microliters of test material/plate and found to be non-mutagenic to the bacterial strains tested. The number of revertant colonies as a result of treatment with the test material did not differ significantly from the number produced by the DMSO vehicle control. The test material was not toxic to any strain at any concentration. The positive controls, sodium azide, 2-nitrofluorene, and 9-aminoacridine at concentrations ranging from 2.5-100 microgram/plate produced more than a 10-fold greater incidence of his$^-$ revertants/plate with the bacterial strains used in this study. The test material was also tested in the presence of an S9 microsomal fraction from Aroclor 1254-treated rat livers. The concentrations tested (1, 0.3, 0.1, 0.03, and 0.01 microliters of test material/plate) in the activated system did not induce significant detectable mutagenic events with the bacterial strains used. The positive metabolic activated control, 2-anthramine (2.5 microgram/plate) produced positive mutagenic responses in the bacterial strains used in this study.

Conclusions	The test material did not produce significant mutation in any of the Salmonella strains in the quantitative mutagenesis assay, either in the presence or absence of metabolic activation. Thus, under the conditions of the assay employed, the test material was determined to be non-mutagenic in the Salmonella/microsome mutagenesis assay.
Data Quality	Reliable without restriction (Klimisch Code)
References	This robust summary was prepared from an unpublished study by an individual member company of the HERTG (the underlying study contains confidential business information).
Other	Updated: 12-27-99